

15. For a, b + c all you need is  $F_g$  !

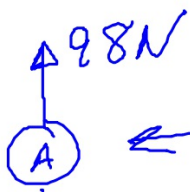
So...  $F_g = ?$   $F_g = mg = (11)(9.8)$

$= 108 \text{ N}$

**Technically, you are computing  
the force to COUNTER  $F_g$ !**

13.

$m = ?$



$$F_g = 98N - 58.8N = 39.2N \quad m = \frac{F_g}{g}$$

so  $m_A = 4kg$

$T_1 = 58.8N$



$$F_g = 58.8 - 49 = 9.8$$

$m_B = 1kg$

$T_2 = 49N$



$\uparrow 49N$

$$F_g = 39.2N \quad m = \frac{39.2}{9.8}$$

$m_C = 4kg$

$T_3 = 9.8N$



$\uparrow 9.8$

Start

here

$\downarrow F_g$

must be  $9.8N$

$$m = \frac{9.8}{9.8}$$

$= 1kg = m_D$